

IN THE CLAIMS

The listing of claims are provided for convenience; no amendments are made:

1. (Previously Presented) A method of treating a bacterial infection in a subject, comprising:
providing a composition comprising a polypeptide, or a derivative or analogue thereof, comprising repeats of a peptide derived from a Heparan Sulphate Proteoglycan (HSPG) receptor binding region of an apolipoprotein; and
administering said composition to said subject.
2. (Previously Presented) The method of claim 1, wherein the peptide is derived from a HSPG receptor binding region of apolipoprotein B or apolipoprotein E.
3. (Previously Presented) The method of claim 1, wherein the peptide is derived from an apolipoprotein B LDL receptor binding domain cluster B, or from an apolipoprotein E LDL receptor binding domain cluster B.
4. (Previously Presented) The method of claim 1, wherein the polypeptide comprises at least two RKR motifs.
5. (Previously Presented) The method of claim 1, wherein the polypeptide comprises a tandem dimer repeat of: SEQ ID No. 1, SEQ ID No. 2, SEQ ID No. 96, or a derivative thereof wherein at least one amino acid residue, other than RKR motifs, is replaced by an Arginine (R), Tyrosine (Y), Methionine (M), Isoleucine (I), Phenylalanine (F), Tryptophan (W), or a derivative thereof.
6. (Previously Presented) The method of claim 5, wherein the replaced or substituted residue is the first, second, third, seventh, eighth, ninth, tenth, eleventh, twelfth, sixteenth, seventeenth or eighteenth residue of the polypeptide.
7. (Previously Presented) The method of claim 5, wherein the at least one amino acid substitution is a Phenylalanine (F) residue or a Tryptophan (W) residue, or a derivative thereof.

8. (Previously Presented) The method of claim 1, wherein the polypeptide has the formula:
- $$\{abcRKRxyz\} + \{a'b'c'RKRx'y'z'\} \text{ (formula I), and}$$
- wherein
- a and a' are each independently selected from Arginine (R); Tyrosine (Y); Methionine (M); Isoleucine (I); Phenylalanine (F); Tryptophan (W); Leucine (L); Lysine (K); Histidine (H); or are deleted;
- b and b' are each independently selected from Arginine (R); Tyrosine (Y); Methionine (M); Isoleucine (I); Phenylalanine (F); Tryptophan (W); Leucine (L); Lysine (K); or are deleted;
- c and c' are each independently selected from Arginine (R); Tyrosine (Y); Methionine (M); Isoleucine (I); Phenylalanine (F); Tryptophan (W); Leucine (L); Lysine (K); Histidine (H); or Threonine (T); or are deleted;
- x and x' are each independently selected from Arginine (R); Tyrosine (Y); Methionine (M); Isoleucine (I); Phenylalanine (F); Tryptophan (W); Leucine (L); Lysine (K); Histidine (H); or Glycine (G); or are deleted;
- y and y' are each independently selected from Arginine (R); Tyrosine (Y); Methionine (M); Isoleucine (I); Phenylalanine (F); Tryptophan (W); Leucine (L); Lysine (K); Histidine (H); or are deleted;
- z and z' are each independently selected from Arginine (R); Tyrosine (Y); Methionine (M); Isoleucine (I); Phenylalanine (F); Tryptophan (W); Leucine (L); Lysine (K); Histidine (H); or are deleted.
9. (Previously Presented) The method of claim 8, wherein the polypeptide comprises at least one additional amino acid, independently selected from Arginine (R); Tyrosine (Y); Methionine (M); Isoleucine (I); Phenylalanine (F); Tryptophan (W); Leucine (L); Lysine (K); Histidine (H), and which additional amino acid is added before the amino acid at position 'a' in the peptide of formula I at the N-terminal.
10. (Previously Presented) The method of claim 1, wherein the polypeptide comprises: a repeat of the peptide apoE₁₄₁₋₁₄₉ (SEQ ID NO. 1) or a truncation thereof, or a repeat of a variant of the peptide apoE₁₄₁₋₁₄₉ in which at least one Leucine (L) residue is replaced by Tryptophan (W), Arginine (R), Lysine (K), Tyrosine (Y) or Phenylalanine (F).

11. (Previously Presented) A method of treating a bacterial infection in a subject, comprising:
providing a composition comprising a polypeptide comprising a repeat of the peptide apoE₁₄₁₋₁₄₉ (SEQ ID NO. 1) or a truncation thereof, or a repeat of a variant of peptide apoE₁₄₁₋₁₄₉ in which at least one Leucine (L) residue is replaced by Tryptophan (W), Arginine (R), Lysine (K), Tyrosine (Y) or Phenylalanine (F); and
administering said composition to said subject.
12. (Previously Presented) The method of claim 11, wherein the polypeptide comprises a repeat of apoE₁₄₁₋₁₄₉ (SEQ ID No. 1) or a truncation thereof, characterised in that at least one Leucine (L) residue is replaced by a Tryptophan (W), or a Phenylalanine (F) residue.
13. (Previously Presented) The method of claim 11, wherein the tandem repeat comprises at least two substitutions independently selected from Tryptophan (W), Arginine (R), Lysine (K), Tyrosine (Y), or Phenylalanine (F) substitutions.
14. (Previously Presented) The method of claim 1, wherein the polypeptide comprises the amino acid sequence: LRKLRKRLLLRKLRKRL (SEQ ID NO. 6); WRKWRKRWWWRKWRKRWW (SEQ ID No. 7); WRKWRKRWRKWRKR (SEQ ID No. 8); WRKWRKRWWLRKLRKRL (SEQ ID No. 9); YRKYRKRYYYRKYRKRY (SEQ ID No. 10); LRKLRKRLRKLRKR (SEQ ID No. 11); LRKRLLLRKLRKRL (SEQ ID No. 3); FRKFRKRFFFRRKFRKRFF (SEQ ID No. 48); WRKWRKRWWWRKWRKRWW (SEQ ID NO. 63); WRKWRKRWRKWRKRW (SEQ ID NO. 64); WRKWRKRWWFRKWRKRWW (SEQ ID NO. 65); WRKWRKRFFWRKWRKRFF (SEQ ID NO. 66); WRKRWWWRKRWWR (SEQ ID NO. 67); LRKLRKRLRLRKLRKRL (SEQ ID NO. 68); WRKWRKRWWWRKWRKRWW (SEQ ID NO. 69); LRKLRKRLWRKWRKRWW (SEQ ID NO. 70); LRKLRKRLLLRKLRKRWW (SEQ ID NO. 71); LRKLRKRLWRKWRKRLL (SEQ ID NO. 72); WRKWRKRLLLRKLRKRL (SEQ ID NO. 73); WRKLRKRLLLRKLRKRL (SEQ ID NO. 74); WRKWRKFFFRRKWRKRWW (SEQ ID NO. 75); or WRKWRKRWWFRKFRKRFF (SEQ ID NO. 76).

15. (Previously Presented) The method of claim 1, wherein the polypeptide comprises repeats of a peptide derived from an HSPG receptor binding region of apoB.
16. (Previously Presented) A method of treating a bacterial infection in a subject, comprising:
providing a composition comprising a polypeptide, or a derivative or analogue thereof, comprising repeats of a peptide derived from an HSPG receptor binding region of apolipoprotein B; and
administering said composition to said subject.
17. (Previously Presented) The method of claim 15, wherein the polypeptide is derived from an apolipoprotein B LDL receptor binding domain cluster B.
18. (Previously Presented) The method of claim 16, wherein the polypeptide comprises a repeat of apoB₃₃₅₉₋₃₃₆₇ (SEQ ID No. 2) or a truncation or variant thereof.
19. (Previously Presented) The method of claim 16, wherein the polypeptide comprises at least two RKR motifs.
20. (Previously Presented) The method of claim 16, wherein the polypeptide has the sequence of RLTRKRGLKRLTRKRGLK (SEQ ID No. 12) or a truncation thereof wherein at least one amino acid residue, other than the RKR motifs, has been replaced by a Glycine (G), Threonine (T), Histidine (H), Tryptophan (W), Arginine (R) or Leucine (L) residue or derivatives thereof.
21. (Previously Presented) The method of claim 20, wherein the at least one amino acid residue has been replaced by a Tryptophan (W), Arginine (R) or Leucine (L) residue or derivative thereof.
22. (Previously Presented) The method of claim 16, wherein the polypeptide has formula:
$$\{abcRKRxyz\} + \{a'b'c'RKRx'y'z'\} \text{ (formula IV)}$$

wherein

a and a' are each independently selected from a positively charged residue, selected from either Arginine (R) or Lysine (K) or Histidine (H); Leucine (L); Tryptophan (W); or are deleted;

b and b' are each independently selected from Leucine (L); Arginine (R); Lysine (K); or are is deleted;

c and c' are each independently selected from Threonine (T); Tryptophan (W); or a positively charged residue, selected from Arginine (R) or Lysine (K) or Histidine (H);

x and x' are each independently selected from Glycine (G); Tryptophan (W); Leucine (L); or a positively charged residue, selected from Arginine (R) or Lysine (K) or Histidine (H);

y and y' are each independently selected from Leucine (L); a positively charged residue, selected from Arginine (R) or Lysine (K) or Histidine (H); or are is deleted;

z and z' are each independently selected from a positively charged residue, selected from Arginine (R) or Lysine (K) or Histidine (H); or Leucine; or is deleted.

23. (Previously Presented) The method of claim 16, wherein the polypeptide is: RTRKRGRTRKRGR (SEQ ID No.13); LRKRKRLLRKRKRL (SEQ ID No.14); LRKRKRLRKLRKRKRLRK (SEQ ID No.15); WRWRKRWKWRWRKRWK (SEQ ID No.16); LLRKRLKRLLLRKRLKRL (SEQ ID NO. 80); RRWRKRWKWRWRKRWK (SEQ ID No. 83); KRWRKRWKWRWRKRWK (SEQ ID No.84); LRWRKRWKWRWRKRWK (SEQ ID No. 85); HRWRKRWKWRWRKRWK (SEQ ID No. 86); RWRKRWKWRWRKRWK (SEQ ID NO.87); RRWRKRWKRRWRKRWK (SEQ ID NO.88); LRWRKRWKLRWRKRWK (SEQ ID No.89); HRWRKRWKHRWRKRWK (SEQ ID No.90); RWRKRWKRWKRWK (SEQ ID NO.91); RWRKRGRKRWKRGRK (SEQ ID No. 92); RWRKRWKRWKRWK (SEQ ID No.93); RKRGWKWRKRGWKW (SEQ ID No.94); or RLTRKRGRLTRKRG (SEQ ID No.95).
24. (Previously Presented) The method of claim 16, wherein the polypeptide has the sequence of RLTRKRGLKRLTRKRGLK (SEQ ID No.12).

25. (Original) A polypeptide comprising a repeat of the peptide apoE₁₄₁₋₁₄₉ (SEQ ID No.1) or a truncation thereof, characterised in that at least one Leucine (L) residue is replaced by Tyrosine (Y) or Phenylalanine (F).
26. (Original) A polypeptide, derivative or analogue thereof, comprising an amino acid sequence of: SEQ ID No. 3 (GIN 2); SEQ ID No. 4 (GIN 11); SEQ ID No. 67 (MU 81); SEQ ID No. 68 (MU 82); SEQ ID No. 80 (MU 24); SEQ ID No. 94 (MU 73) or SEQ ID No. 95 (MU 74).
27. (Previously Presented) A medicament, comprising a polypeptide according to claim 25.
Claim 28 (Canceled).
29. (Previously Presented) The method of claim 1, wherein said bacterial infection is a *Staphylococcus Pseudomonadales* or *Streptococci* infection.
30. (Previously Presented) A nucleic acid sequence encoding a polypeptide according to claim 25.
31. (Previously Presented) A method of preventing and/or treating a bacterial contamination comprising:
providing a composition comprising a polypeptide, or a derivative or analogue thereof, comprising repeats of a peptide derived from a Heparan Sulphate Proteoglycan (HSPG) receptor binding region of an apolipoprotein; and
coating an object or a surface in need thereof with an amount of said composition in an amount effective for killing or preventing growth of bacteria.
32. (Previously Presented) The method according to claim 31 wherein said object is selected from the group consisting of medical devices, lenses, contact lenses, catheters, stents, wound healing dressings, contraceptives, surgical implants and replacement joints.
33. (Previously Presented) The method according to claim 31 wherein said surface is selected from the group consisting of hospital ward surfaces, operating theatre surfaces, kitchen surfaces and sanitary surfaces.

34. (Previously Presented) A contact lens at least partially coated with a peptide, derivative or analogue thereof, comprising repeats of a peptide derived from a Heparan Sulphate Proteoglycan (HSPG) receptor binding region of an apolipoprotein.
35. (Previously Presented) The method of claim 11, wherein the polypeptide comprises the amino acid sequence: LRKLRKRLLLRKLRKRL (SEQ ID NO. 6); WRKWRKRWWWRKWRKRWW (SEQ ID No. 7); WRKWRKRWRKWRKR (SEQ ID No. 8); WRKWRKRWWLRKLRKRL (SEQ ID No. 9); YRKYRKRYYYRKYRKRY (SEQ ID No. 10); LRKLRKRLRKLRKR (SEQ ID No. 11); LRKRLLLRKLRKRL (SEQ ID No. 3); FRKFRKRFFFRKFRKRFF (SEQ ID No. 48); WRKWRKRWWWRKWRKRWW (SEQ ID NO. 63); WRKWRKRWRKWRKRW (SEQ ID NO. 64); WRKWRKRWWFRKWRKRWW (SEQ ID NO. 65); WRKWRKRFFWRKWRKRFF (SEQ ID NO. 66); WRKRWWWRKRWWR (SEQ ID NO. 67); LRKLRKRLRLRKLRKRLR (SEQ ID NO. 68); WRKWRKRWWWRKWRKRWW (SEQ ID NO. 69); LRKLRKRLWRKWRKRWW (SEQ ID NO. 70); LRKLRKRLLLRKLRKRWW (SEQ ID NO. 71); LRKLRKRLWRKWRKRLL (SEQ ID NO. 72); WRKWRKRLLLRKLRKRL (SEQ ID NO. 73); WRKLRKRLLLRKLRKRL (SEQ ID NO. 74); WRKWRKFFFRKWRKRWW (SEQ ID NO. 75); or WRKWRKRWWFRKFRKRFF (SEQ ID NO. 76).
36. (Previously Presented) The method of claim 16, wherein the polypeptide is derived from an apolipoprotein B LDL receptor binding domain cluster B.
37. (Previously Presented) A medicament, comprising a polypeptide according to claim 26.
38. (Previously Presented) The method of claim 11, wherein said bacterial infection is a *Staphylococcus Pseudomonadales* or *Streptococci* infection.
39. (Previously Presented) The method of claim 16, wherein said bacterial infection is a *Staphylococcus Pseudomonadales* or *Streptococci* infection.
40. (Previously Presented) A nucleic acid sequence encoding a polypeptide according to claim 26.